



# Agenda



Time	Presentation	Speaker
10:00 / 16:30	Welcome	Amparo Toledano IURC Central Coordination Services (CCS)
10:00 – 10:10 / 16:30 – 16:40	Initial analysis based on IURC projects.	Ana Contreras Regenerative Design Manager ACCIONA and IURC CCS Consortium Manager
10:10 – 10:40 / 16:40 – 17:10	Regenerative by design: a new way of facing the complexity of sustainable challenges.	José Luis Blasco Global Sustainability Director ACCIONA
10:40 – 10:45 / 17:10 – 17:15	Q&A	
10:45 – 10:55 / 17:15 – 17:25	Cultural transformation: New European Bauhaus (NEB) insights.	Sandra Marín IURC CCS Team Leader and NEB Expert
10:55 – 11:00 / 17:25 – 17:30	Q&A	
11:00 – 11:20 / 17:30 – 17:50	Keys for project financing.	Diego Marín CEO Concessions ACCIONA
11:20 – 11:25 / 17:50 - 17:55	Q&A	
11:25 / 17:55	Closing remarks.	Ana Contreras Regenerative Design Manager ACCIONA and IURC CCS Consortium Manager
11:25 – 11:30 / 17:55 – 18:00	Break	
<b>SESSION RESTRICTED TO IURC MEMBERS ONLY</b>		
11:30 – 12:30 / 18:00 – 19:00	RESILIENCE: Accelerating the decision-making process in complex environments.  A practical session with ACCIONA's tool that allows decision-making with algorithms in complex environments and offers the possibility of experimenting with different indicators.	José Luis Blasco Global Sustainability Director ACCIONA Ana Contreras Regenerative Design Manager ACCIONA and IURC CCS Consortium Manager



# REGENERATIVE BY DESIGN

JOSE LUIS BLASCO  
GLOBAL SUSTAINABILITY DIRECTOR

7 MARCH 2023

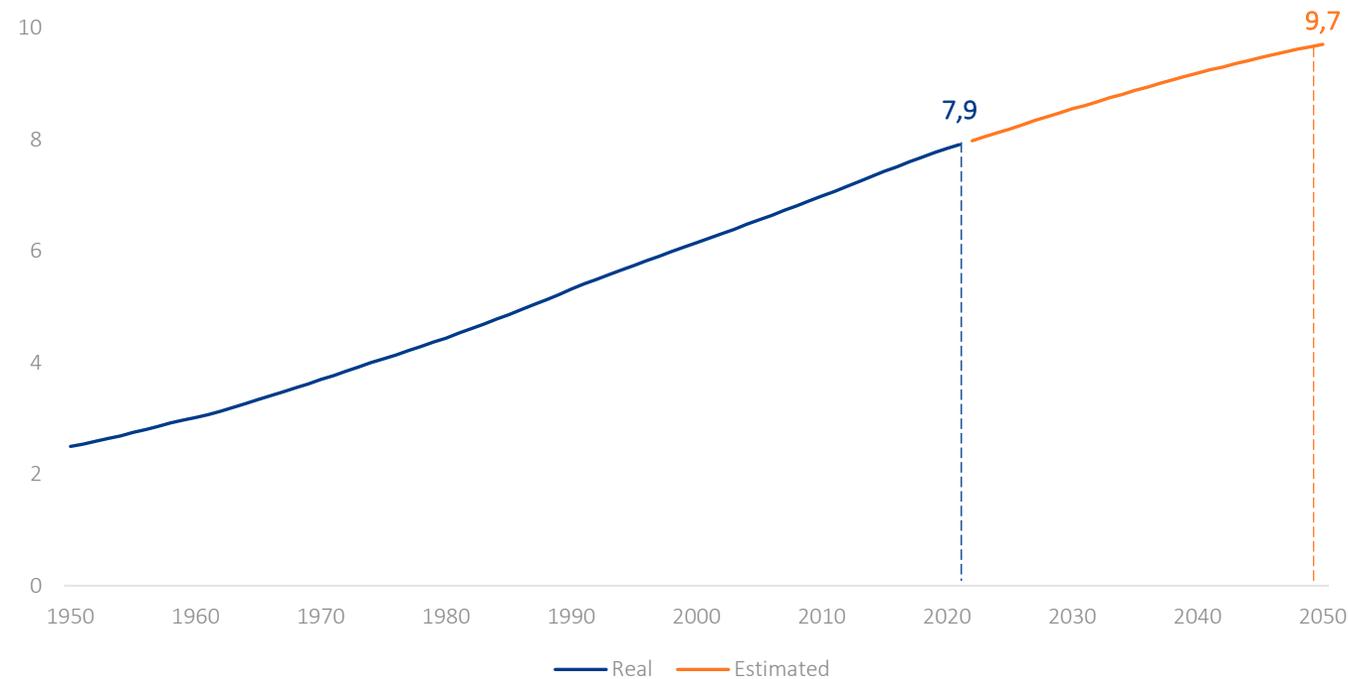


# POPULATION GROWTH IS FUELING ALL

The foundation of societal resilience

## Population growth poses major challenges

Global population (billions of people)



### By 2050

- Expected growth **↑ 22.8%** equivalent to 1.8 million people
- **240 million** people without clean water access
- Almost **70%** of the world's population will live in **urban areas**
- **1.4 billion** people without access to basic **sanitation**
- **Deaths from air pollution** increases from 1 to **3.6 million** people per year
- **Forest areas will decrease by 13%** due to human pressure.

Source: United Nations - Population Division (2022)  
 World Population Prospects 2022 is the 27th edition of the official estimates and projections of the global population that have been published by the United Nations since 1951. The estimates are based on all available sources of data on population size and levels of fertility, mortality and international migration for 237 countries or areas. More details at <https://population.un.org/wpp/Publications/>.

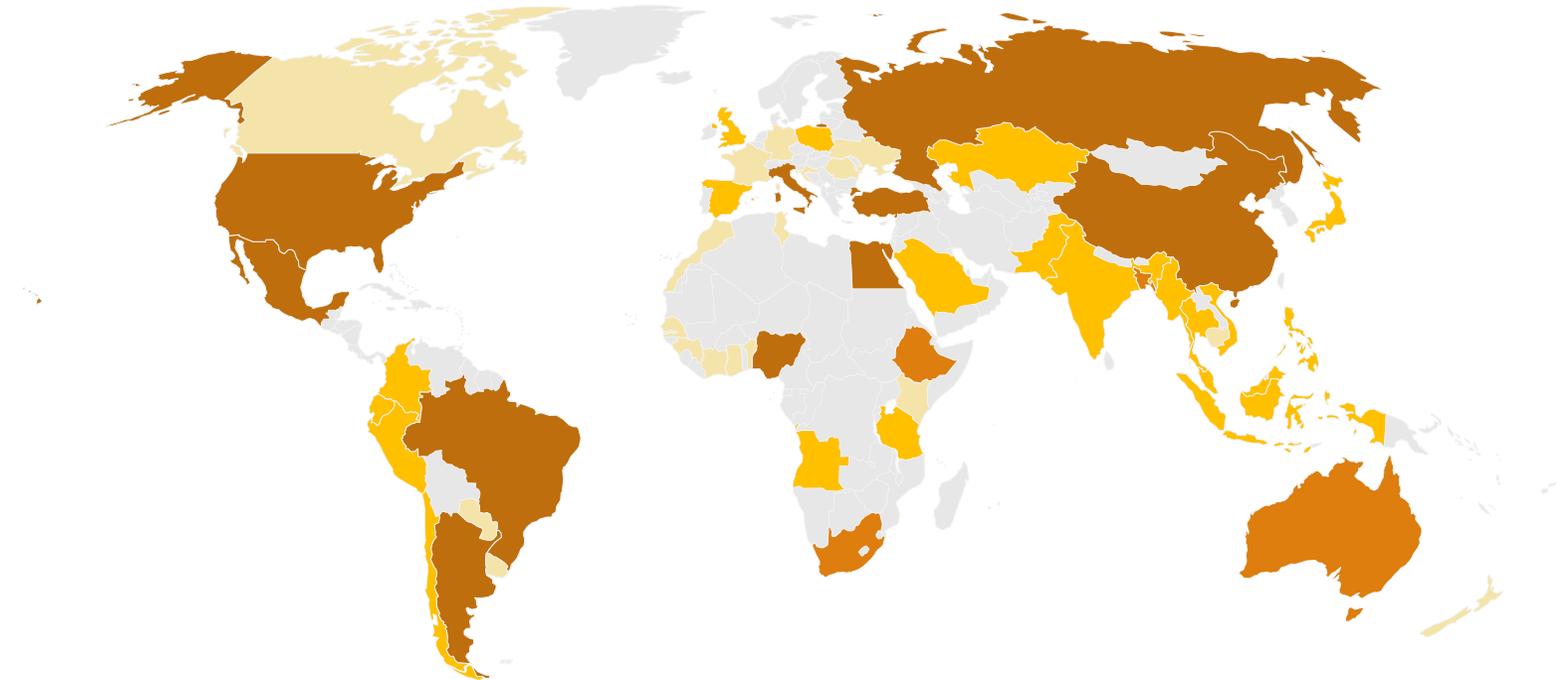
# INVESTING IN THE INFRASTRUCTURE GAP

Infrastructure roadmap to 2040

Expected investments are 19% higher than under current trends and average \$4.6 trillion per year

Total forecast  
infrastructure  
investment gap by 2040

- > USD 200 billion
- USD 150 – USD 200 billion
- USD 100 – USD 150 billion
- USD 50 – USD 100 billion
- USD 0 – USD 50 billion
- N/A



Source: Oxford Economics

# INVESTING IN THE INFRASTRUCTURE GAP

Infrastructure roadmap to 2040

Investment gaps bring opportunities to reimagine infrastructures



ENERGY  
**\$28 tn**

to supply a growing energy demand



TRANSPORT  
**\$50 tn**

to improve transportation systems



WATER  
**\$6 tn**

to supply a growing population



SOCIAL  
**\$10 tn**

to ensure an inclusive development

**\$94 tn**

Infrastructure investment gap by 2040

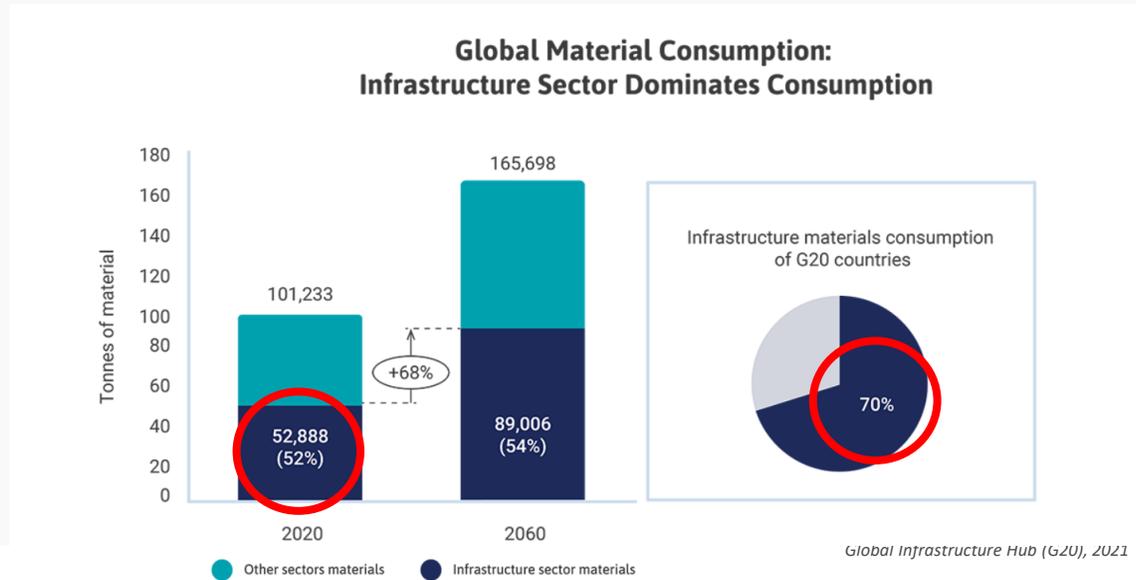


...in an overshooted planet

# PLANET PRODUCTIVITY

More than half of the global material consumption and close to 70% of the energy consumption is related to infrastructure

Infrastructure consumes more than half the world's materials - it will be key to advancing sustainable production and consumption



**2060**  
*With similar intensity*

**Cement consumption**  
*from 4 to 7 Mt*

**Iron & Steel consumption**  
*from 1,5 to 3Mt*

**Fossil fuel consumption**  
*from 120.000 to 220.000 TWh*

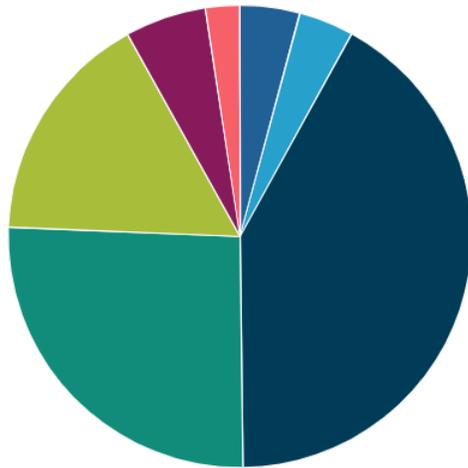
These estimates are based on the work of the International Resource Panel's modelling workstream. It employs a population, urbanisation and economic growth scenario to the Socio-Economic Pathways 2 of the Intergovernmental Panel for Climate Change (IPCC) 'Middle of the Road Scenario'. Infrastructure materials include iron and steel, concrete, bricks, non-ferrous metals and structural timber. Aside from infrastructure, the other major contributors to global material usage include fossil fuel extraction and biomass.

# PLANET PRODUCTIVITY

Increasing productivity is a sustainable imperative to make investment more efficient in order to cover the deficit more quickly, and the second is to do with fewer public resources

**Figure 7: Infrastructure construction (new work) by sub-sector**

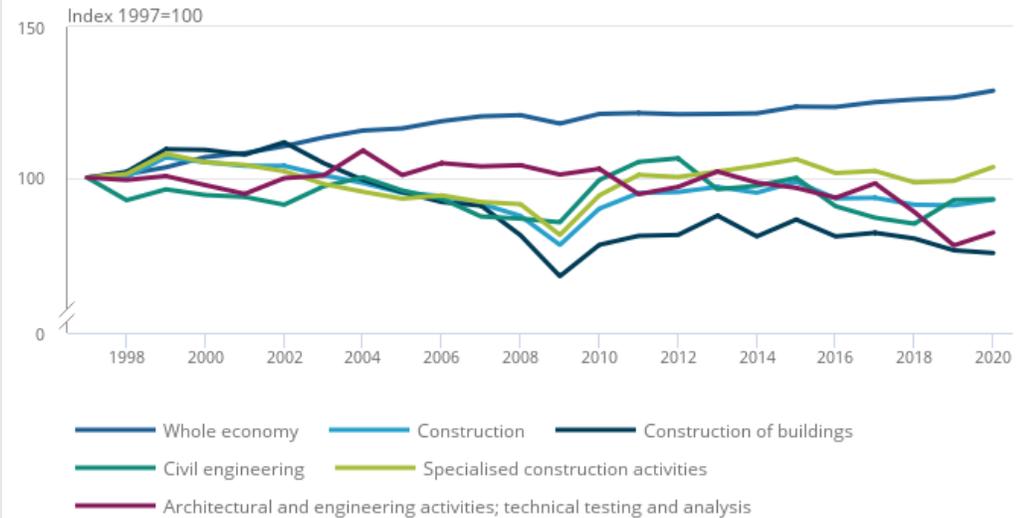
Current prices, Great Britain, 2020



● Water ● Sewerage ● Electricity ● Roads ● Railways ● Harbours ● Other

**Figure 2: Productivity growth has been slow in construction industries compared with the whole economy**

Output per hour worked, construction industry and sub-industries and whole economy, UK, 1997 to 2020, index 1997 = 100



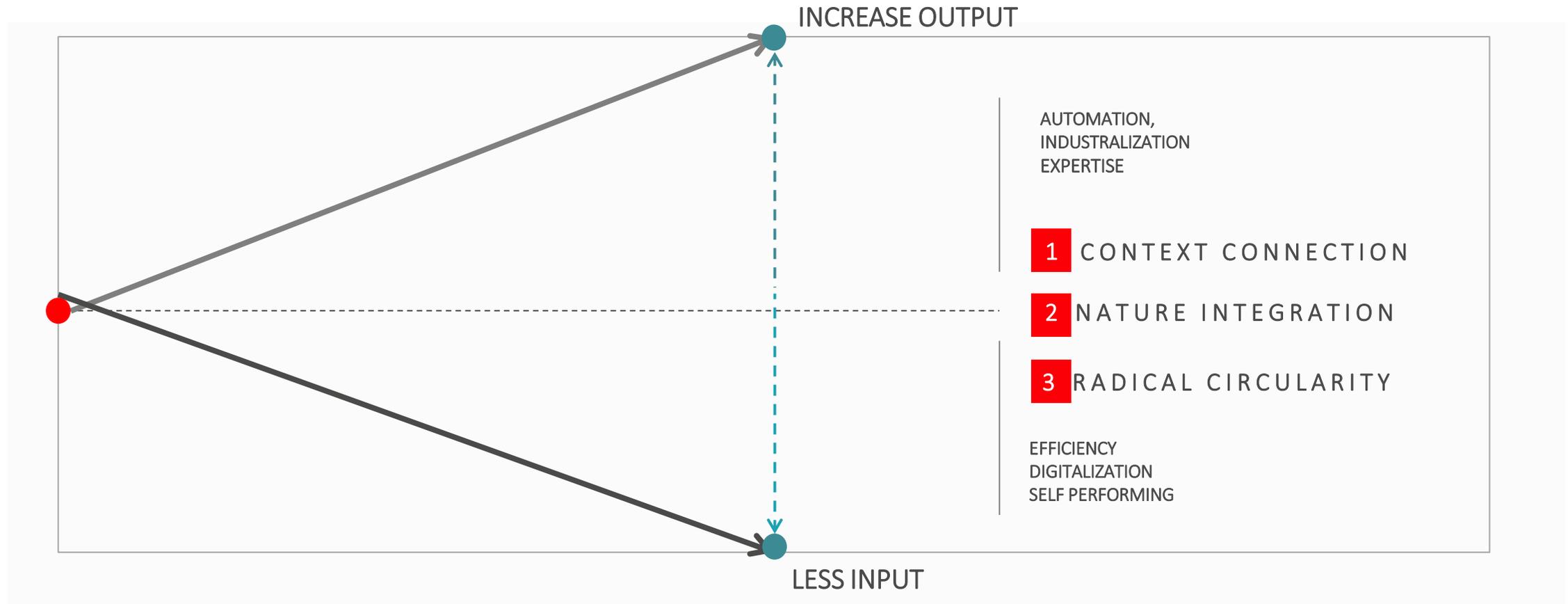
Source: Office for National Statistics - Labour productivity

**Infrastructure activities face an endemic productivity challenge**

A NEW MEANING FOR SUSTAINABLE INFRASTRUCTURE?

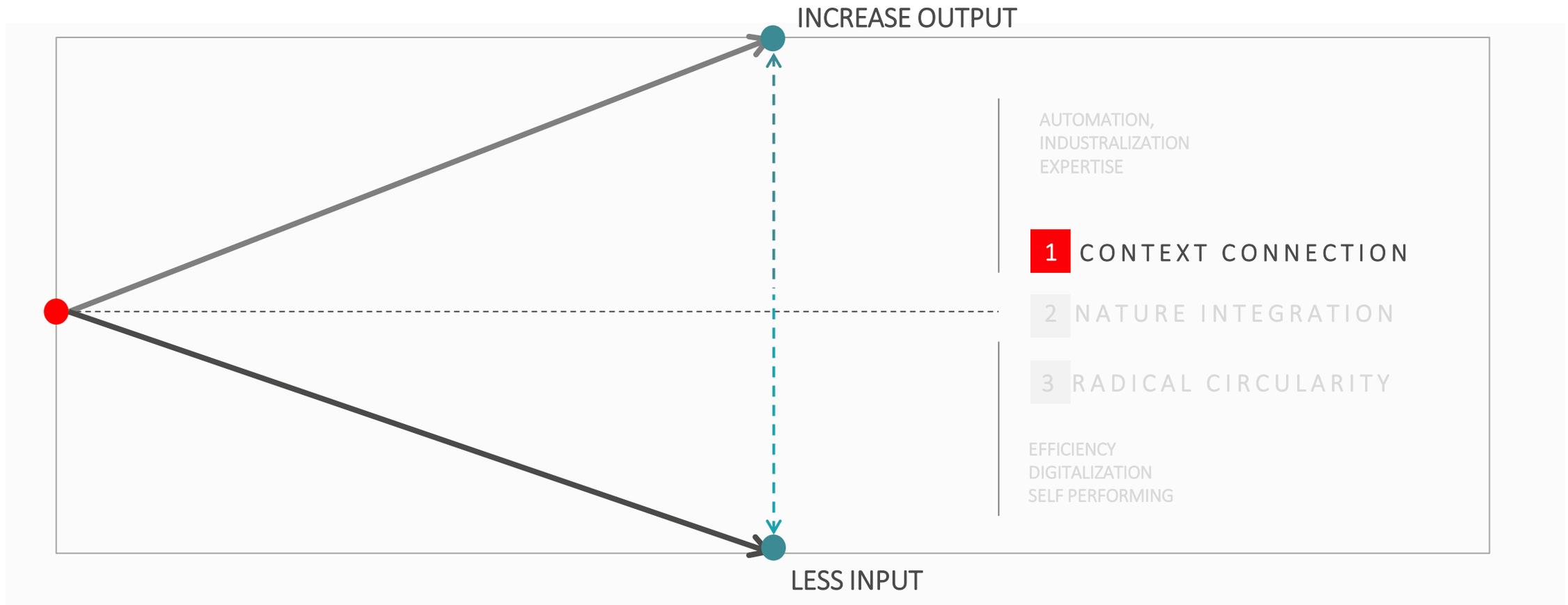
# REGENERATIVE INFRASTRUCTURE

Boosting infrastructure performance. Balancing value creation and resource consumption



# REGENERATIVE INFRASTRUCTURE

Boosting infrastructure performance. Balancing value creation and resource consumption

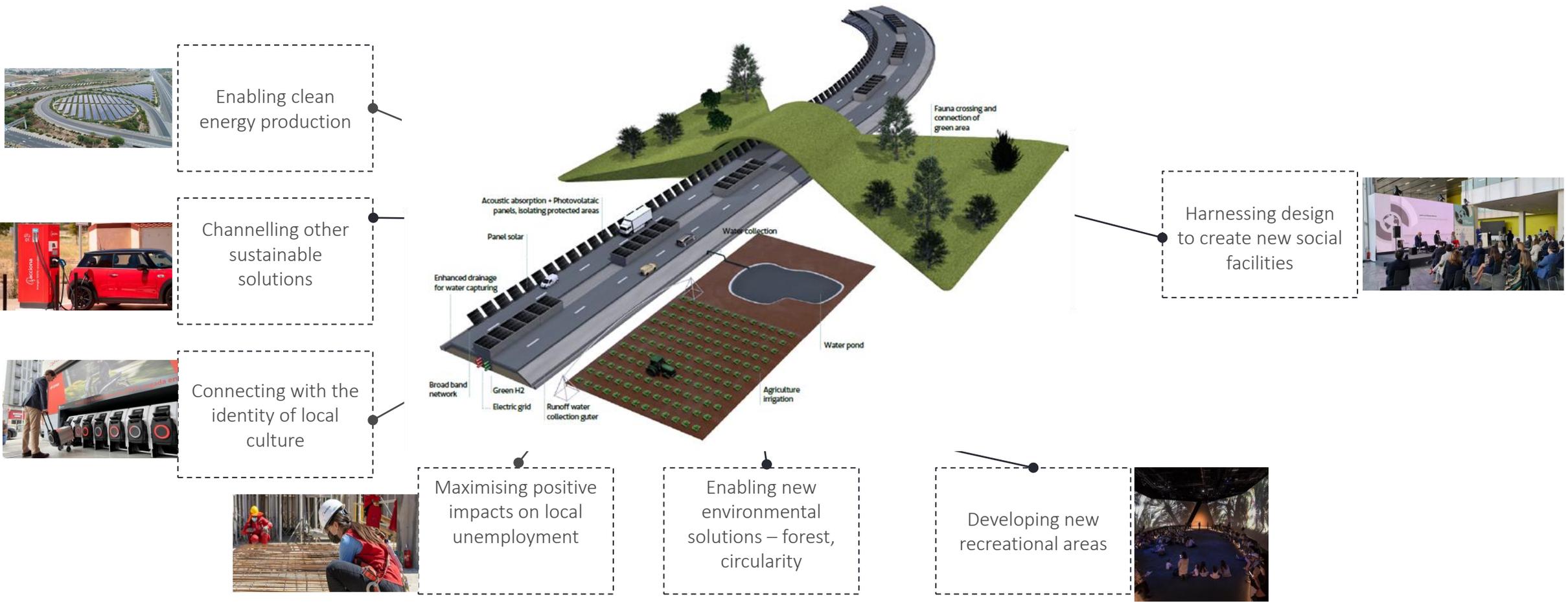


1

# CONTEXT CONNECTION

Levering up social productivity through a better context understanding

Connecting infrastructure with the context introducing additional functionalities to the project



2

# NATURE INTEGRATION

Infrastructures that synergize with the planet rather than overpower it



Seoul, Korea

Singapore

Melbourne, Australia



Los Angeles, USA



Chapultepec, Mexico



Valletta, Malta



Sasaki, Japan



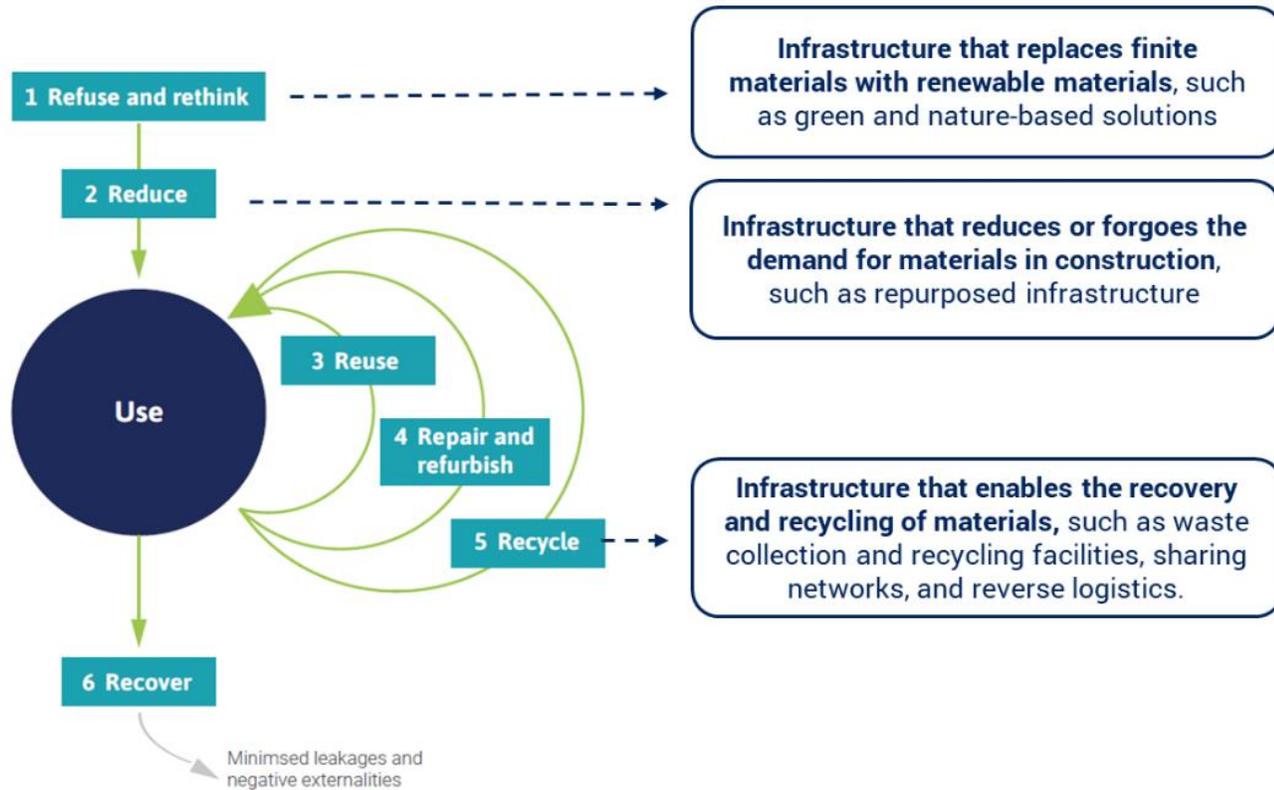
New York, USA



3

# RADICAL CIRCULARITY

Net-zero infrastructures



ENGLISH

## Electric excavators mean zero-emissions construction sites

This year, the Olav Vs gate and Klingenberggata site will be a zero-emissions development project – thanks to electric excavators and wheel loaders. This is generating interest in Japan.

TEKST MARI FOSSHEIM FOTO HAMPUS LUNDGREN → JUNI 20, 2019

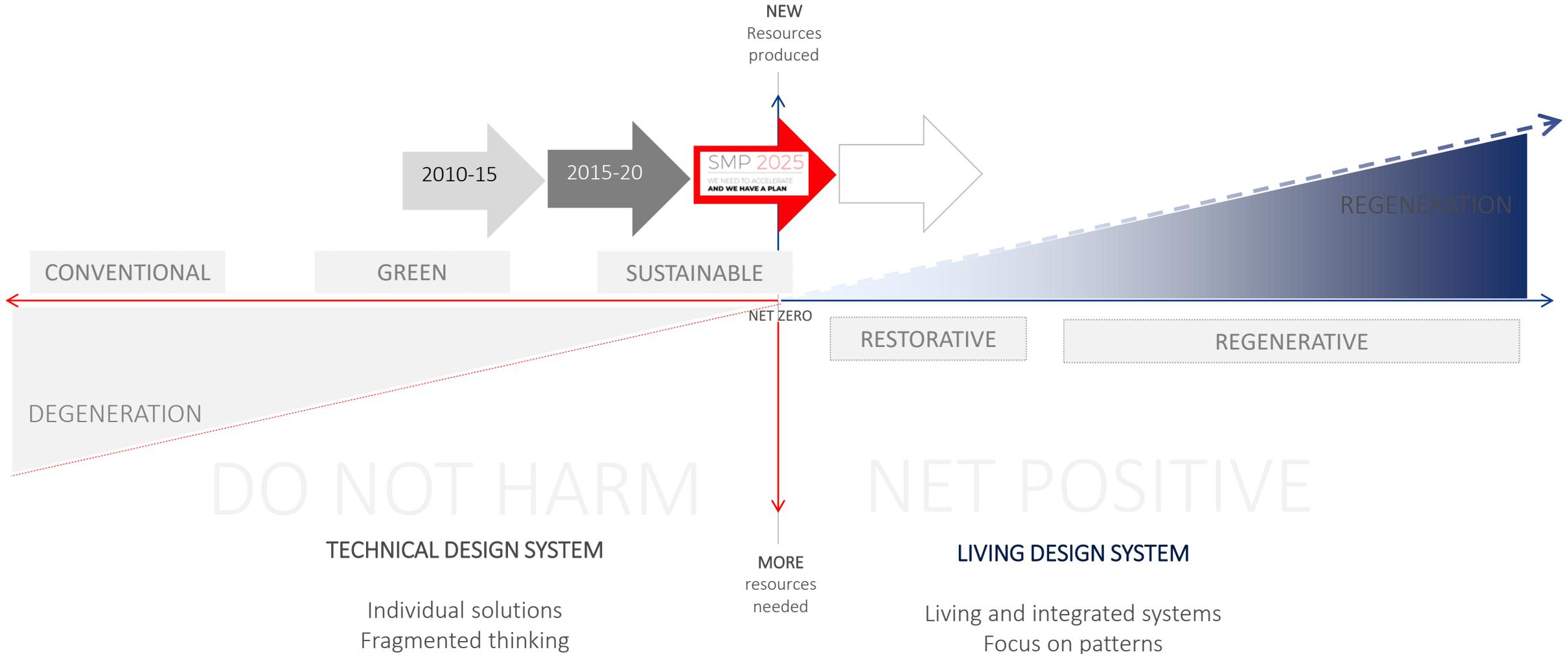
# REGENERATIVE BY DESIGN

LOCAL CONNECTION · NATURE INTEGRATION · RADICAL CIRCULARITY



# A NEW GENERATION OF INFRASTRUCTURES

From ESG risks to sustainable assets creation



REGENERATIVE BY DESIGN





# NEW EUROPEAN BAUHAUS (NEB)

Culture & Creativity to shift towards a sustainable and decarbonized society

**Sandra Marin Herbert**  
IURC Central Coordination



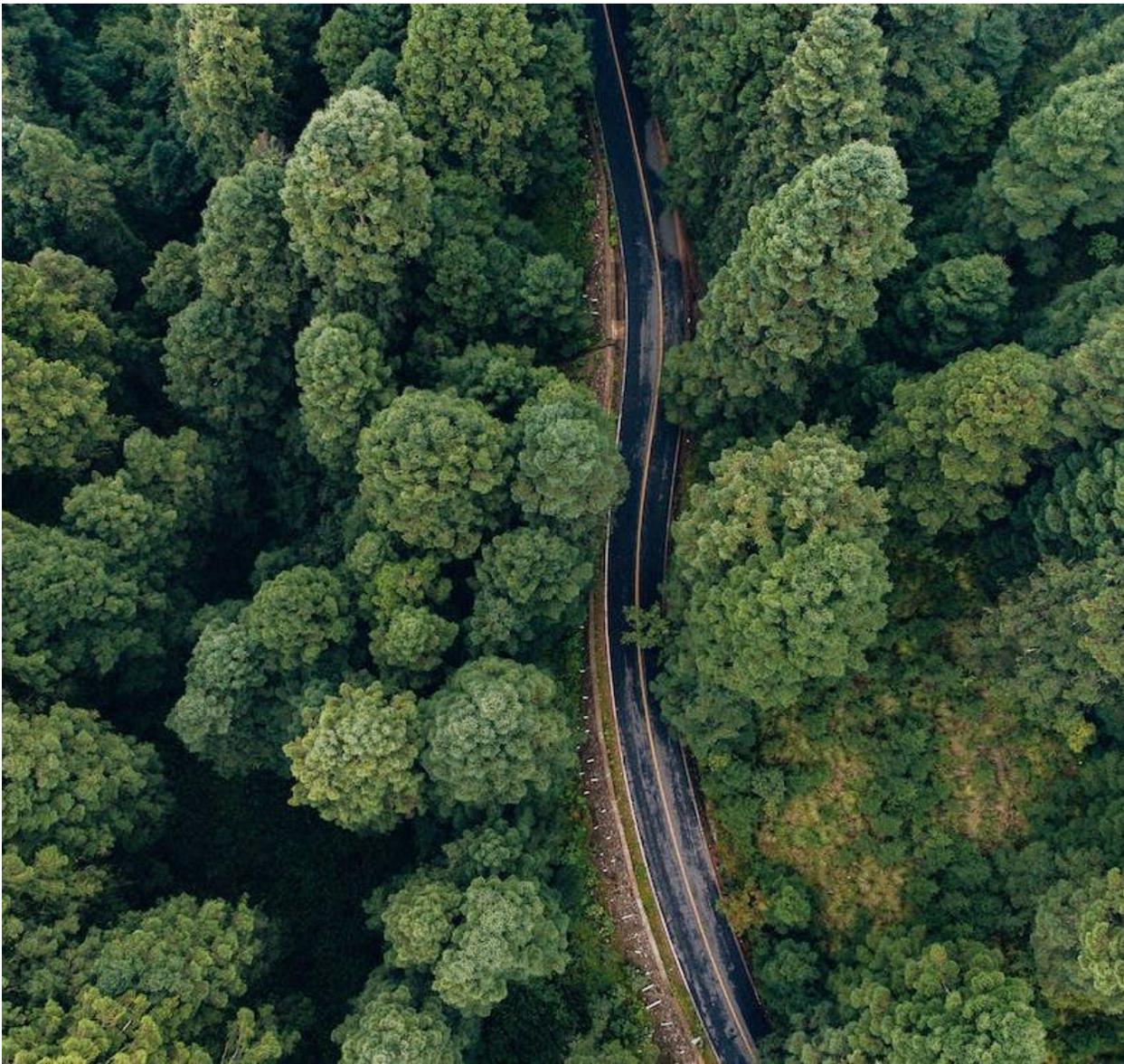
Funded by  
the European Union

**1****KEY CONCEPTS TO UNDERSTAND THE NEB AMBITIONS****2****NEB VALUES****HOW TO DESIGN & TRANSFORM IDEAS INTO NEB PROJECTS****3****NEB PRINCIPLES****HOW TO WORK IN THE “NEB WAY”****4****FUNDING OPPORTUNITIES**



The transition to a climate-neutral society requires a change of mindsets and lifestyles, a cultural shift towards regeneration creating new positive relations with nature

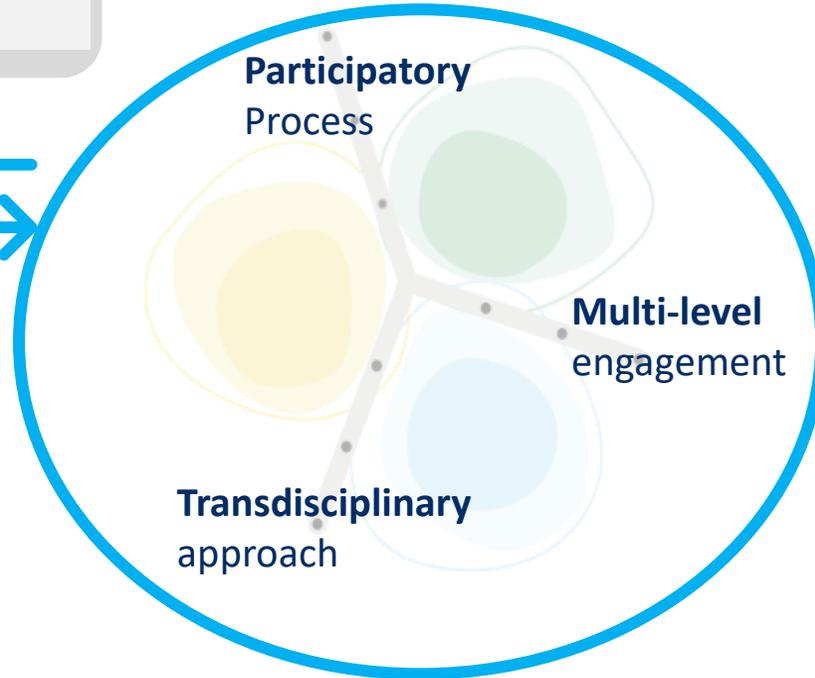
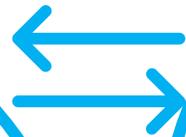
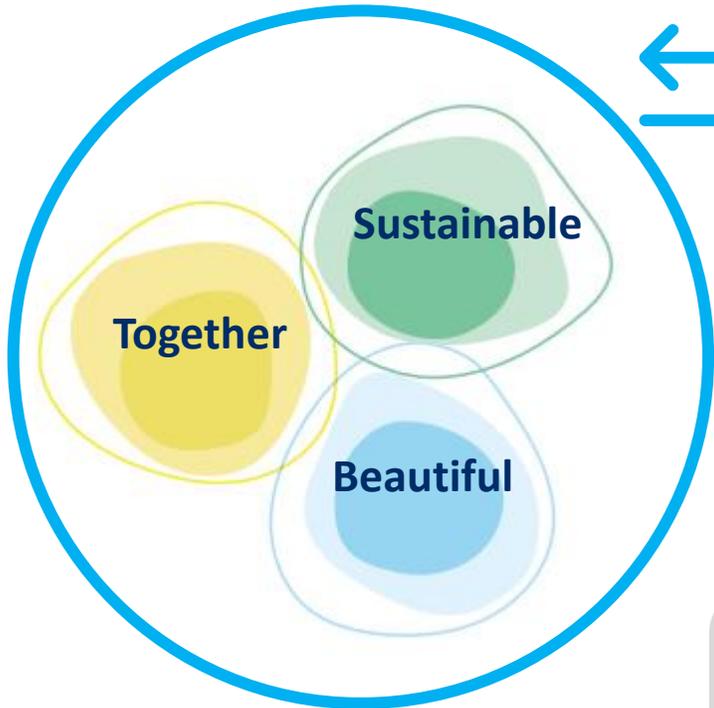
# KEY CONCEPTS TO UNDERSTAND THE NEB AMBITIONS



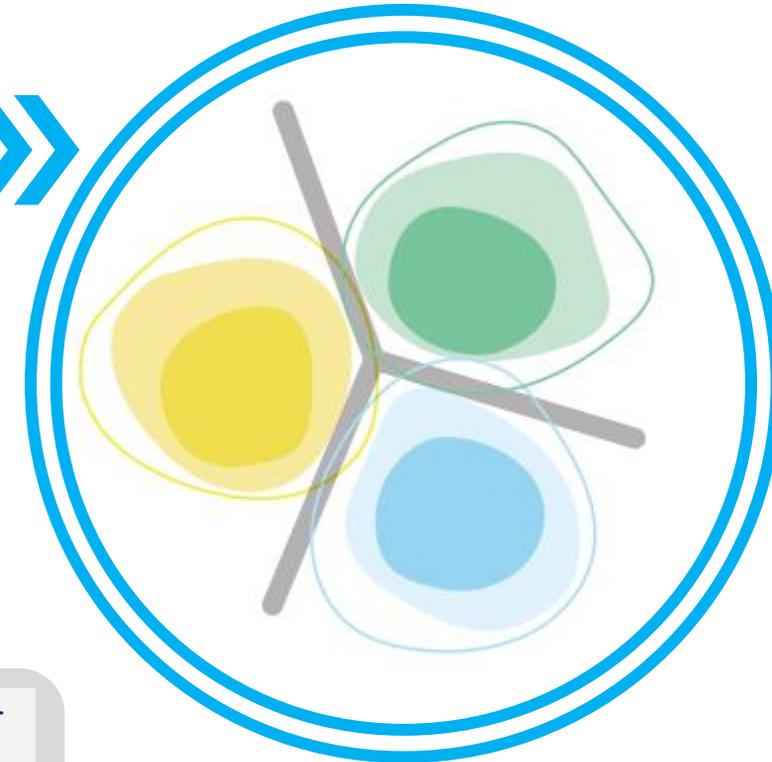
- To **connect** and make tangible the **Green Deal & the Climate Goals with the territory**
- **Transforming Sectors of economy**, to contribute to **climate goals**
- It activates **different actors at different levels**
- Puts art & culture in the backbone of the social change needed to **decarbonization**

### Values

CORE VALUES TO RESPECT AND INCLUDE IN YOUR PROJECTS:  
**THE NEB "SOUL"**



INTEGRATION OF VALUES & PRINCIPLES:  
**NEB PROJECT**



### Principles

WORKING PRINCIPLES THAT A PROJECT NEED TO INCLUDE IN THE WAY THEY OPERATE, TO ACHIEVE THE VALUES:  
**THE NEB "DNA"**



**Beautiful:** beyond aesthetics and functionality, invest collective sensitivity, intelligence, and competences into **creating a positive and enriching experience for people.** Promoting mutual care as a driver for change.



*Umeå (SE): Tyrens architects and the artist Kerstin Bergendal designed it in collaboration with local teenage girls*

# 2

## NEB VALUES AND PRINCIPLES

### How to design & transform ideas into NEB projects



#### Level of Ambition:

1. Focus on senses and emotions. Creates experiences by **activating** cultural, social and natural qualities



Does your project promote a sense of community through places and actions to bring diverse people together?

2. Promotes a sense of belonging through collective experiences and social interactions, **connecting places and people**



Does your project work as a tool to reimagine participants lives and habits?

3. **Integrates** new cultural and social values to re-invent places and lifestyles



Can your project reflect particularities of the territory, for instance, in terms of materials, skills, sensory perceptions, or aesthetic choices for the design?



*Christchurch (NZ)  
integration with  
nature greenbelt*





**Sustainable:** Focus on the environmental side of sustainability, from climate goals to circularity, zero pollution and biodiversity. Considering all life forms, **regenerate and reconnect to nature.**

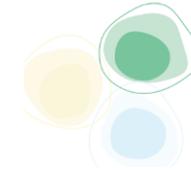


*Barranquilla, (CO) Ecoparque Ciénaga de Mallorquín*

# 2

## NEB VALUES AND PRINCIPLES

### How to design & transform ideas into NEB projects



#### Level of Ambition:

1. Rethink services, products and places to reduce environmental footprint.

**Preserve, repair, re-use, renew**



Can your project reduce the use of resources, materials and energy, e.g. making them last longer or sharing them?

2. Reduce linear processes or **transform them into circular**



Is your project including any plan to reduce environmental impacts increasing durability, adaptability and recyclability?

3: **Regenerate**, enhancing biodiversity, expanding nature at an ecosystem scale



Does your project give more than it takes?



Ecoparque Ciénaga de Mallorquín, Barranquilla



# Together: inclusion, diversity and equality to securing accessibility and affordability for all

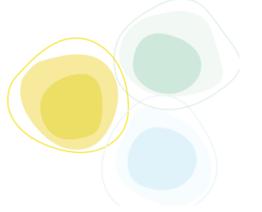


# 2

## NEB VALUES AND PRINCIPLES

### How to design & transform ideas into NEB projects

Together



Level of Ambition:

1. Include “less represented” individuals, groups and communities



How does your project facilitate access to all in an easy and affordable way?

2. Avoid segregation, open access is secured through structural mechanisms



Does your project foreseen funding instruments, business models, regulations or any structural and formal mechanisms?

3. New ways of living together sharing social values **transforming behaviors and lifestyles**



Does your project include tools or instruments to promote new ways of living together?



*Neighbourhood Houses-Turin*

## NEB PRINCIPLES

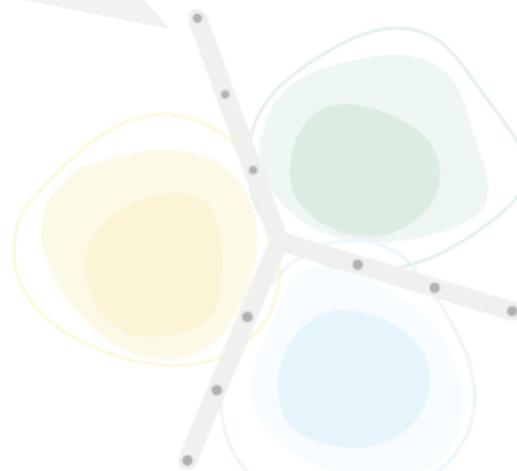
### How to work in the “NEB WAY”

**Participatory process:** civil society / community affected by the project is involved in the design, decision-making and implementation phases.

**Level of Ambition:** from information & consultation, to co-creation and self-govern

**Multi-level engagement:** across scales and fields. Project as the bridge between the local and global dimension. Combination of place-based approach and systemic thinking

**Level of Ambition:** starting horizontally at local level, connect vertically and globally multi-scale impact



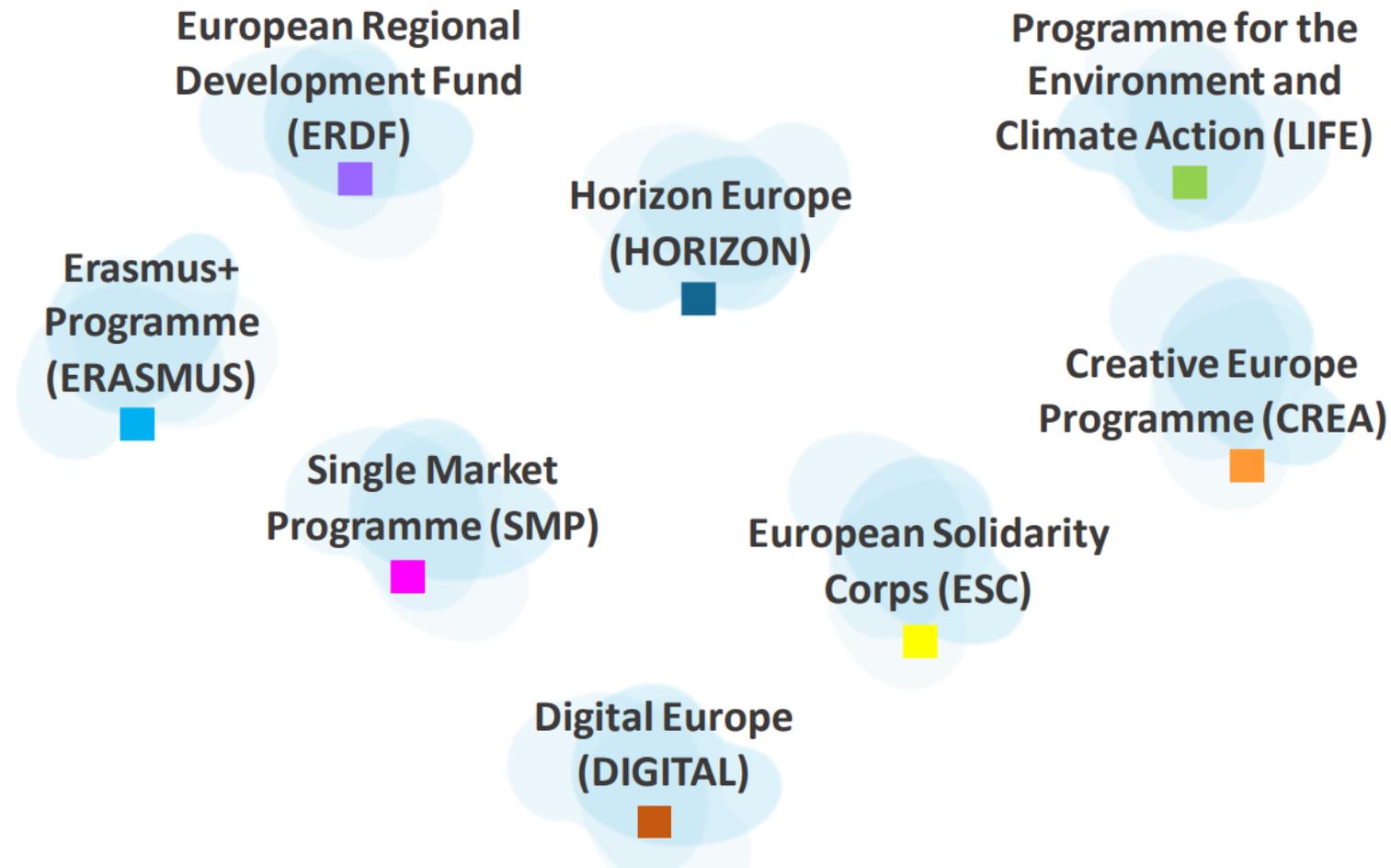
**Transdisciplinary approach:** knowledge and practitioners from different fields integrating views from different disciplines but also backgrounds (non-academics)

**Level of Ambition:** starting with diversity of disciplines and educational background working on a common problem independently, advance to a collaboration among them and finalize reaching the interaction of formal and non-formal knowledge

# 4 | FUNDING OPPORTUNITIES

## Main programmes

Overview of EU funding opportunities to support the achievement of the New European Bauhaus objectives (2023-2024)



[https://new-european-bauhaus.europa.eu/get-involved/funding-opportunities\\_en](https://new-european-bauhaus.europa.eu/get-involved/funding-opportunities_en)

# 4 | FUNDING OPPORTUNITIES NEB dedicated calls



## EU Programmes for the transformation of the built environment and associated lifestyles at local level (2023-2024)

Title	When	Reference
European Urban Initiative	October 2022 – January 2023	European Regional Development Fund (ERDF)
Affordable Housing District Demonstrator	December 2022 – April 2023	HORIZON-CL4-2023-RESILIENCE-01-44
Urban greening and re-naturing for urban regeneration, resilience and climate neutrality	January – April 2023	HORIZON-MISS-2023-CLIMA-CITIES-01-01
New European Bauhaus – innovative solutions for greener and fairer ways of life through arts and culture, architecture and design for all	October 2023 – February 2024	HORIZON-CL2-2024-HERITAGE-01-01
Demonstrating the potential of nature-based solutions and the New European Bauhaus to contribute to sustainable, inclusive and resilient living spaces and communities	October 2023 – February 2024	HORIZON-CL6-2024-BIODIV-02-2-two-stage

# 4 | FUNDING OPPORTUNITIES NEB dedicated calls



## EU Programmes to Support innovation aimed at integrating the NEB values in new solutions & products (2023-2024)

Title	When	Reference
Acceleration of the New European Bauhaus start-ups by the EIT	January 2023– March 2023	Horizon Europe (HORIZON)
Climate-smart use of wood in the construction sector to support the New European Bauhaus	October 2023- February 2024	HORIZON-CL6-2024-CLIMATE-01-5
Localised and Urban Manufacturing, supporting creativity and the New European Bauhaus	December 2023 – March 2024	HORIZON-CL4-2023-HUMAN-01-53

## EU Programmes to spread new meanings questioning our mind-set around the NEB values

Title	When	Reference
European Youth Together	November 2022 – March 2023	ERASMUS-YOUTH-2023-YOUTH-TOG
Unlock the potential of the New European Bauhaus in urban food system transformation	October 2023 – February 2024	HORIZON-CL6-2024-COMMUNITIES-01-1

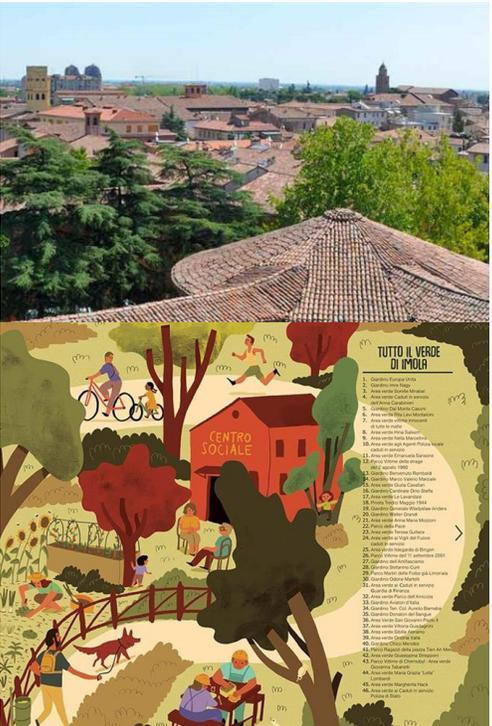
# THANK YOU

Sandra Marin Herbert



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**Thematic Network:**

*Ecological Transition & Green Deal*

**Cross cutting challenge:**

*Digital Transition & Smart City*

**Action/Project description:**

Both cities agreed to set up a joint research centre for knowledge exchange on sustainability and green urban development, focusing on the areas Nature Based Solutions, Ecological Transition, as well as sustainable tourism, the cultural and creative industry, and smart and sustainable city with technology and cultural perspectives.

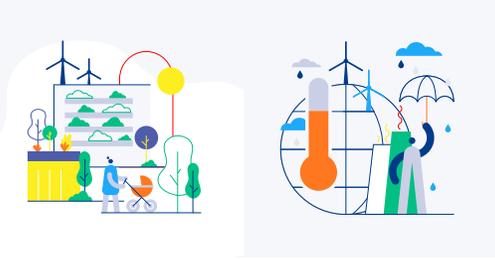
- Analysis and study activities
- Training for administrations, companies and designers
- Academic exchange
- Exhibitions, Workshops, Conferences, Seminars
- Development program of "Green Design Ambassador"
- Annual B2B exchange program for technicians, entrepreneurs, planners, architects, and designers

**Main goals:**

- To scale up NBS and NEB initiatives.
- To enhance the awareness of nature and culture in urban planning and design through education and training.
- To integrate innovative technology with nature-based solutions.

## Key financing challenges

- 1 To secure funds for implementing the green design centre.
- 2 To sustain a public-private financing model. To promote the financial participation of professionals and Associations.
- 3 To allocate administrative capacity to coordinate and support stakeholders and resource management.
- 4 To analyse programs and opportunities of funding at EU and International level (Horizon, World Bank, UN, UNESCO, etc.).
- 5 To create new models of fundraising and crowdfunding.
- 6 To define a set of services to offer on the market for private associations and public bodies.



### Thematic Network:

*Ecological Transition & Green Deal*

### Cross cutting challenge:

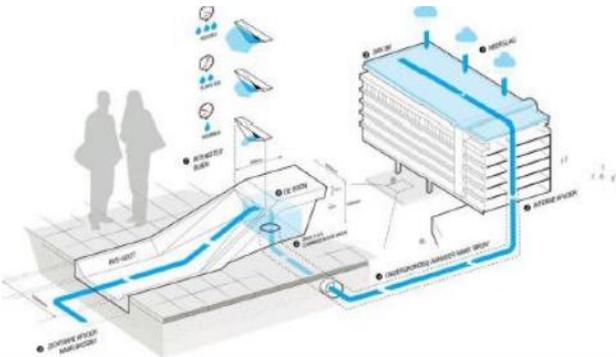
*NBS- Greening- Water Management*

### Action/Project description:

The concept of water plaza – Khel-Kund (water reservoirs constructed to collect and harvest rainwater), derives its inspiration from the traditional water management systems 'Kunds'. Besides their main purpose, these modern water plazas are used as water bodies for various religious and socio-cultural activities such as immersions of deity idols. During the dry season, the water plaza will provide for a social and sports space for all age groups. The first pilot water plaza in the Singapore area of Surat (size: 5,547 m<sup>2</sup>) has been designed for Surat with the contribution of IUC, IURC and the City of Rotterdam, which has extensive experience in this field. The pilot has been included in the Surat Municipal Corporation budget and is under tendering. Seven more water plazas are in the planning phase.

### Main goals:

- Minimize urban flooding and the pollution of water bodies.
- Build resilience to climate change impacts and variable rain patterns, protecting groundwater depletion.
- Promote reuse of rainwater through blue infrastructures, serving as a public space for citizens and for community events.



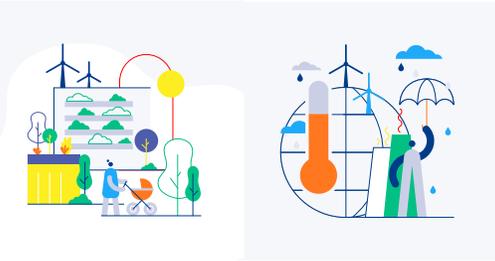
## Key financing challenges

- 1 Secure funds for 7 water plazas in Surat ranging from 2,500-8,000 m<sup>2</sup> (design, construction). **Total cost: ~ 6 million Euros**
- 2 Ensure financial sustainability for blue infrastructure operation in Surat.
- 3 Develop viable PPP model for construction and operation of water plazas.
- 4 Introduce a financially sustainable approach for scaling up the water plazas model in various cities across India.



# Installation of solar panels in individual households for energy production

Sofia / Sejong



## Thematic Network:

*Ecological Transition & Green Deal*

## Cross cutting challenge:

*Energy Transition & Climate Change*

### **Action/Project description:**

Both cities have already well-established their joint action in new and renewable energy and are planning to take the next steps to begin the contact with Korean companies interested in exporting their knowledge and technology to Bulgaria. Sejong (Korea) can provide the expertise in technology. Sofia (Bulgaria) has the raw materials and opportunities via the Recovery and Resilience Plan.

### **Main goals:**

To increase energy efficiency.  
To scale up the project at city level considering the framework: EU Taxonomy approved (possibility for housing).  
To sell excess energy back to the grid via net metering system.

## Key financing challenges

- 1 To secure funds for implementation: financial attractiveness.
- 2 To define a public-private financing model.
- 3 Administrative capacity to coordinate and support all involved stakeholders: technologies exporters, Net-Metering Advisor, KOTRA (support to pass administrative process to export), start-up support, etc.
- 4 To find local partners in Sofia.
- 5 Financial sustainability during the operation of the system.

## Thematic Network:

*Ecological Transition & Green Deal:  
Circular Economy - Waste Management*

## Cross cutting challenge:

*Climate Change and Energy Transition*

### Action/Project description:

The pairing wishes to exchange knowledge on waste management, including recycling and collection of special waste, legal frameworks, and waste fee structures. They are also interested in promoting zero-waste policies and the design of communication and educational campaigns to increase recycling and reduce waste. Alternatives uses as waste to energy and improving recycling strategies.

### Main goals:

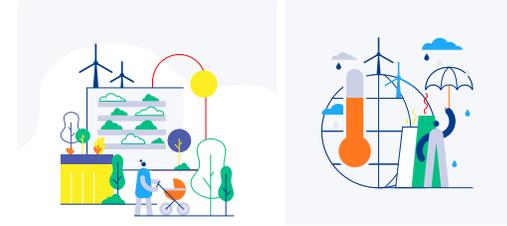
To exchange experience and best practices related to municipal actions to implement Zero Waste policies.

To increase capacity building for recycling and waste reduction through communication campaigns with different social segments.

To exchange experience to develop a legal framework in order to establish specific local regulations for the management of urban solid waste by citizens.

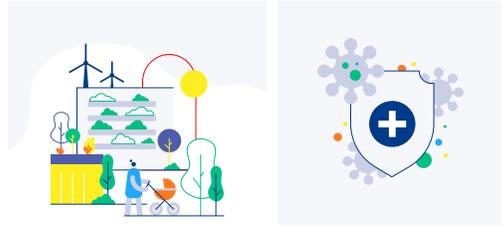
## Key financing challenges

- 1 Necessary regulatory changes in circular economy and waste fees. (only in the case of Fortaleza).
- 2 Incentives to change citizens' behaviors and control illegal waste disposal.
- 3 To raise awareness through campaigns and programmes (i.e. for scaling up biogas and waste to energy initiatives and pilots).
- 4 Financial sustainability for waste management operation (maintenance of recycling centres, efficiency in waste recollection systems and timetables, sorting and recycling of waste, etc.).
- 5 Bankability: financial attractiveness for new technologies to improve waste collection and recycling systems..



# Multicultural events with communities to promote social cohesion

Aurora / Bergamo / Rimini



## Thematic Network:

*Urban & Regional Renewal and Social Cohesion:*  
Urban Poverty- Deprived Neighbourhoods

## Cross cutting challenge:

*Post Covid Recovery*



### **Action/Project description:**

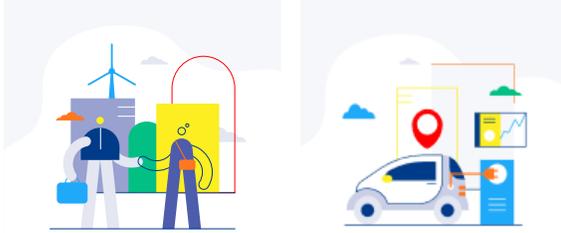
The three cities of Aurora, Bergamo, and Rimini are interested in developing a joint project around multicultural events with communities to promote social cohesion. The three cities are thinking about the possibility of developing a common framework and approach in the design of this type of event, letting each city implement the specific events on its territory and collaboration with its own communities.

### **Main goals:**

- To promote economic and social equity.
- To foster respect and open-mindedness for other cultures.
- To change the visitors' attitudes, thoughts and views of migrants' populations, and multiculturalism (transformational benefit).
- To learn new things about different cultures/the mainstream cultures (cognitive benefit).
- To stimulate the economy through culture.
- To enable financial inclusion through financial literacy.

## Key financing challenges

- 1 Support from key actors under co-creative processes (quadruple helix approach).
- 2 Multidisciplinary approach: different managing areas working under the same challenge.
- 3 Administrative capacity: lack of preparation to carry out large multicultural events.
- 4 Lack of internal communication between areas involved in the same project: mobility, waste management, temporary works, etc.
- 5 Alignment of strategic reference frameworks: Sustainable Management of events (UNE-EN-ISO 20121, New European Bauhaus, etc.)



## Thematic Network:

*Innovative Sustainable & Carbon Neutral Ecosystems: Regional Innovation (RIS 4)*

## Cross cutting challenge:

*Smart City and Digital transition*



## Action/Project description:

Technology transfer and joint R&D&I are seen as opportunities to promote cooperation between these two regions and their respective institutions (technology centers, business incubators, universities, etc.) and companies in smart specializations, in particular: medicine, green economy, ICT. Both regions consider technology as the supporting tool for their regional development and are planning to join forces in a common acceleration program as a bridge between the Silesian and Parana's innovation ecosystem .

## Main goals:

Digital Transition, Smart Regions and Economy Digitalization (Industry 4.0) to foster technology business and R&D&I. Transforming actions based on the achievement of Sustainable Development Goals (SDGs).  
Education and entrepreneurship.  
Reurbanisation and sustainability.

## Key financing challenges

- 1 ICT Digital transformation: Creating and strengthening cooperative links between entities from the ICT sector and the R&D&I sphere.
- 2 Improving coordination between different actors in the innovation ecosystem (government, academia, private sector)
- 3 Building a support system for startups (and SMEs) in the ICT industry. Foster the innovation ecosystem for the development of new products, processes and business models.
- 4 Supporting the higher education system to develop educational offers concerning ICT to bridge the supply gap into the regional labor market.
- 5 Vocational and talent training in entrepreneurship and the ability to innovate.



# KEYS FOR PROJECT FINANCING

Diego Marín

Acciona

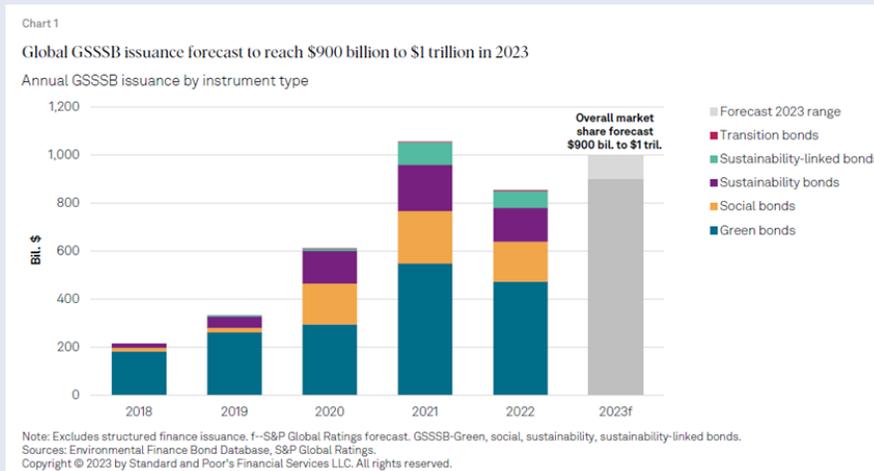
Concessions - CEO

March 7<sup>th</sup> 2023

# Sustainable finance

## Initial analysis

### Sustainable finance: Market trends



### What does Acciona propose?

- Infrastructures committed to and aligned with lenders' environmental taxonomies or international principles
- Ambitious and measurable local indicators and social targets

**Real impact on the communities!**

### Acciona Green and Sustainability Framework

#### CORPORATE TARGETS

- Scope 1&2 emissions reduced by 60% by 2030 (SBTI)
- >90% of eligible CAPEX aligned with taxonomy
- 40,000 hours of certified training for underrepresented groups
- >100 Decarbonization plans for SMEs aligned with UNFCCC or equivalent
- Develop zero-carbon procurement programs



# Sustainable finance

## Main products and process

### Sustainable financial products

#### Use of Proceeds



#### Green Finance Standards alignment

In the case of activities that contribute to, or have an impact when defining environmental objectives (such as adaptation or decarbonization)

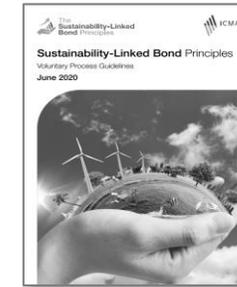
#### EU taxonomy



#### EU Taxonomy alignment

Baseline in the case of activities defined as eligible according to EU taxonomy standards (such as climate change mitigation or adaptation).

#### Sustainability-linked:



#### Sustainability linked finance standards

ESG proposed sustainable indicators and targets measured annually

### ...and process to implement sustainability-linked financing



# Sustainable financing

## How can it be used to have a real impact?

### LINHA 6. Sao Paulo Metro Line

Line 6 Concession channels investment towards a low carbon economy and the global sustainability agenda by committing to **specific targets** while creating local opportunities through a **double impact sustainable solution**

#### Sao Paulo Line 6. Sustainable indicators and targets



##### TAXONOMY ALIGNED ACTIVITY

>95% CAPEX according to EU taxonomy requirements. For an Electric public transportation + >70% circularity



##### INNOVATION

Encourage start-ups and support local entrepreneurship through the Concession and establish sustainable development working lines with local universities.

*Global target:* Support at least 15 start-ups by 2025



##### CERTIFIED PROFESSIONAL TRAINING

Acciona commits to a minimum number of hours of vocational training with a special focus on local communities. Global target: 120,000 hours of certified professional training by 2025



##### GENDER EMPOWERMENT

Accelerate the empowerment of women in construction by working to increase the number of women in the workforce, with equal pay.

*Global goal:* More than 15% of women on projects by 2025



##### ELECTRIC MOBILITY

Based on the need to reduce pollution in Sao Paulo, Acciona is committed to promoting and developing decarbonized mobility alternatives. With a global goal of creating 100 direct jobs among unemployed vulnerable communities

# Example of regenerative program



Estação Sustentável

Home Quem somos Fale Conosco

Buscar

PRÓXIMA PARADA

## Oportunidades para o futuro

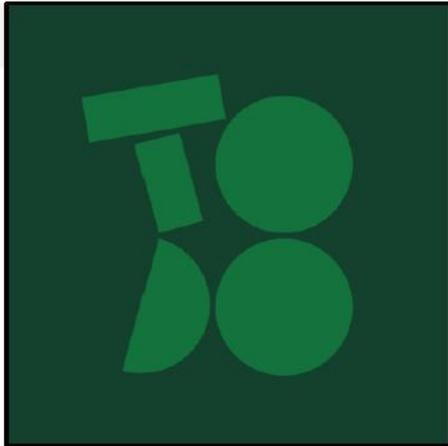
NOSSOS PILARES

- Formação Profissional**  
Cursos gratuitos de
- Empoderamento de Mulheres**  
Ações com o objetivo de
- Inovação**  
Fomento ao
- Mobilidade Elétrica**  
Promoção da mobilidade

# Certified training KPI



# Innovation/ electric mobility KPI



# Ongoing monitoring

ESG  
Verticals



Sustainability Performance Target (SPT) | Accumulated

			2022	2022 RESULTS	2023	2024	2025
	<b>Taxonomy EU</b> Alignment with EU Taxonomy Regulation	% CAPEX aligned with EU Taxonomy Regulation	>95%	<b>100%</b>	>95%	>95%	>95%
	<b>Certified Professional Training</b> Number of hours of professional training with special focus on local communities	Number of hours of training provided	55.000	<b>61.460 h</b>	85.000	110.000	120.000
	<b>Women Empowerment</b> Percentage of women in workforce (full-time equivalent), employed at equal pay	% Women employees (CLU and EPC)	11%	<b>12.02 %</b> (dez. 22)	12%	14%	15%
	<b>Electric Mobility</b> Number of jobs created for unemployed vulnerable people	Number of jobs created	10	<b>10</b>	30	60	100
	<b>Innovation</b> Number of startups supported promoting local entrepreneurship	No. startups supported for their pilot project promotion (MoU signed)	-	<b>1</b>	6	6	15

# Sustainable financing

## Initiatives to fight climate change impacts

### Fargo-Moorhead AREA DIVERSION CHANNEL

- **First green finance** initiative in the US dedicated to **climate change adaptation** (Green Bond and Green Loan)
- The infrastructure will protect more **than 235,000 people** from the effects of potential Red River flooding
- Project Scope: Design, Built, Operate and Maintain over 29 years

30 MILES  
PROTECTION CHANNEL

20 MAJOR  
STRUCTURES

US\$ 2,75 Billions  
TOTAL INVESTMENT

- The Green Bond structure attracted multiple and diverse investors and was approximately 4.6 x oversubscribed



# Principles for project finance

It's not a one-size-fits-all solution

- Challenge: moving **from the idea or pilot** to the ability to really **implement the project**
- Be attractive to the private and public financiers: size, timeline, underlying characteristics, complexity, real sustainability features, structuring, etc
- Keys to a bankable projects:
  - Identification of key stakeholders, end users, risks, mitigation measures to close gaps and impacts, availability of funds...
  - Capacity to assess the real impact of the project in terms of ESG targets
  - Project implementation capacity
  - Structure to take the project to the market – define the potential economic flows and revenue streams to enable a business model
  - Balanced risk allocation between the different parties and right preassessment of risks

## Financial tips for bankability (based on exposed projects):

- 1) Sustainability link Finance.
- 2) Green financing,
- 3) Achieving green certificates.
- 4) Beyond financial: to consider social and environmental issues.
- 5) To use KPIs to calculate return investment: to evaluate the project and its score (only go after thresholds).
- 6) Financial gap: access to Capital through a bottom-up transformation.
- 7) To distribute fees fairly (fees affordable for citizens + incentives to avoid waste.

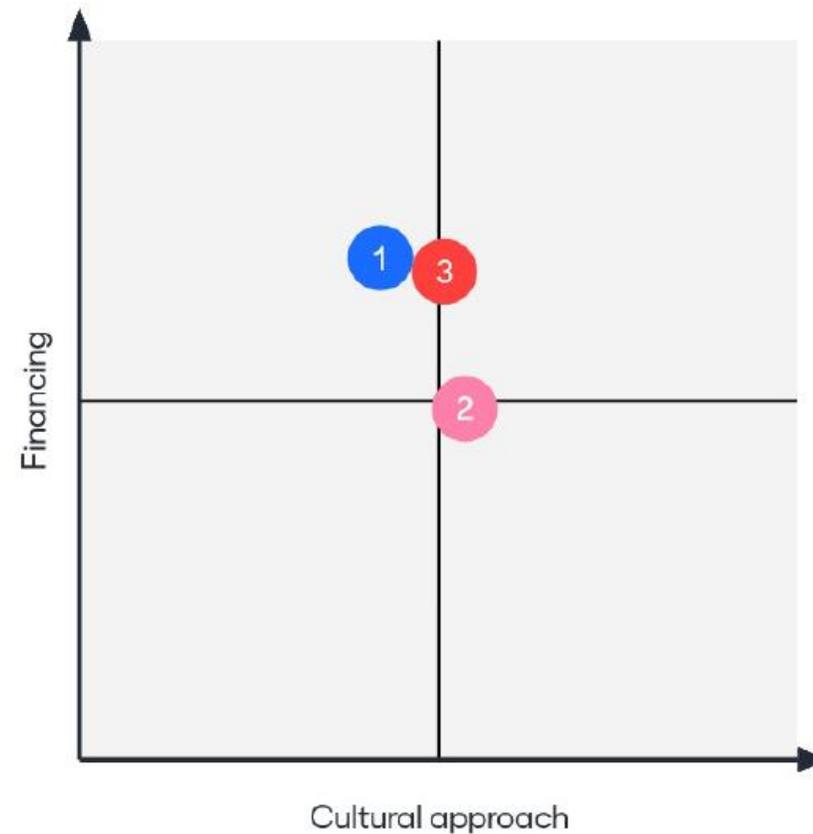


"We need to ask the deeper question of why we are worth sustaining. Such deeper questioning will shape how we might initiate wise actions that help us to transition towards regenerative cultures."

– *Daniel Christian Wahl*

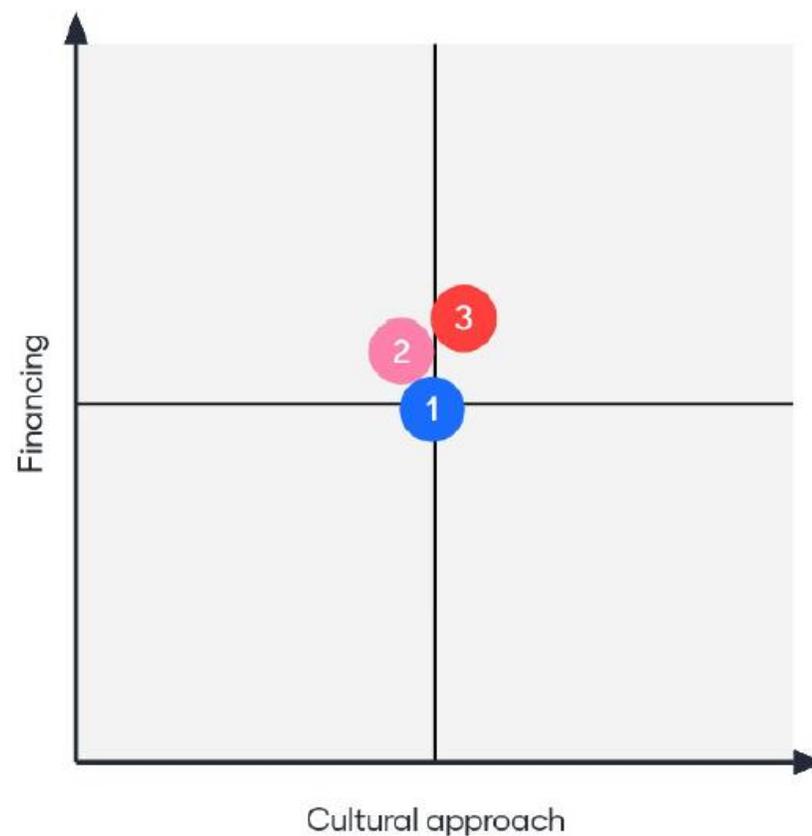


Try to position the following exposed case studies considering the weight of cultural versus financial impact.



- 1 NCI-BOLOGNA – YANGZHOU
- 2 ROTTERDAM-SURAT
- 3 SOFIA-SEJONG

Try to position the following exposed case studies considering the weight of cultural versus financial impact.



- 1 AURORA-BERGAMO-RIMINI
- 2 FORTALEZA-ESSEN
- 3 PARANA-SILESIA



# Lessons Learned

common interests  
kpis are key for projects  
environment relation  
more experience  
great of projects  
culture and nature  
local context is key  
awareness  
cocreative approach  
nature integration  
cultural and creative

stable  
local connection  
positive impact  
beauty ecological impact  
codesign  
sustainability  
pub-priv cooperation  
stakeholders

cultural context



# Lessons Learned





# USING SCIENCE TO DISCOVER WHAT MATTERS WELCOME TO RESILIENCE

## What Resilience is for

Resilience is a **key tool** for making decisions about interconnected issues, making it possible to **prioritise what really matters**.

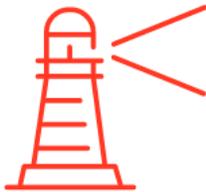


## Processes

Resilience is a tool to solve problems of prioritising salient issues in **3 simple steps**.

### INITIAL PHASE

SETTING OUT THE  
PROBLEM



- > The session moderator **sets out the problem** to be solved in order to report on trends and solutions.
- > Explanation of the **Resilience** tool, dynamics and functionalities.

### EDIT PHASE 1

BRAINSTORMING



- > **Brainstorming**, users interactively generate **relevant topics**. Participants can participate by supporting other participants' themes or proposing new themes.

### EDIT PHASE 2

ASSESSING AND  
LINKING IDEAS



- > Evaluation of topics according to the **different dimensions** defined in the project; impact, relevance, probability, difficulty, etc.
- > Workshop participants link issues by **generating relationships between them**. These relationships are used by the **algorithms in Resilience**, which make it possible to understand and identify the most salient issues.

## SCORING TOPICS

For this project, a series of Metrics have been defined to which it must give value (for each one).

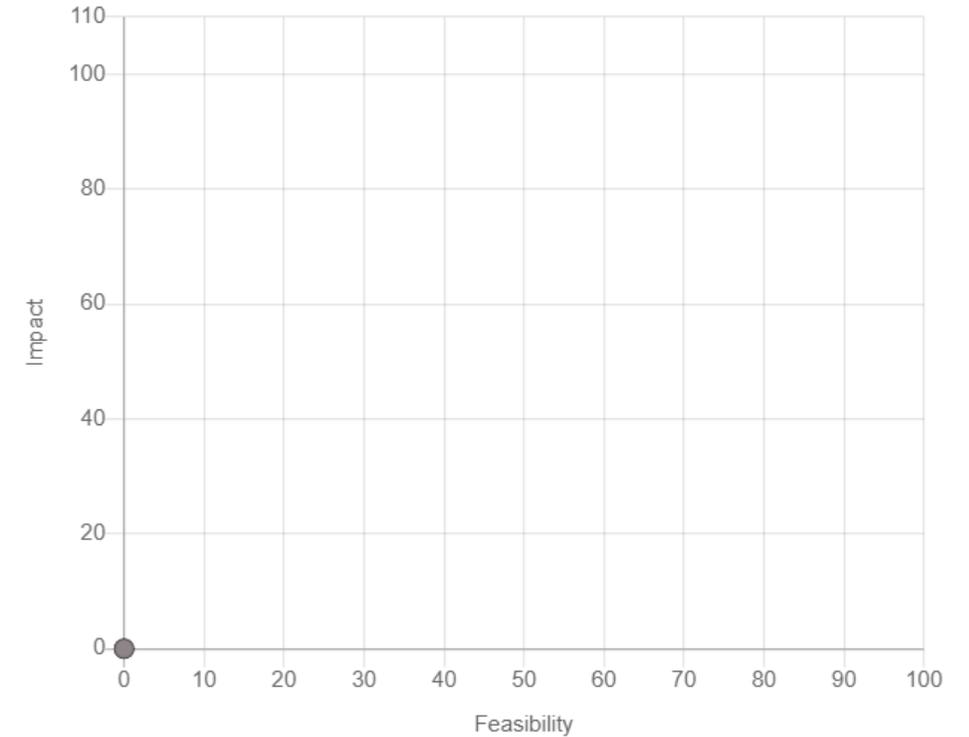
In the following table you can find the metrics created as well as a short explanation of each one.

NAME	AXIS	DESCRIPTION
Feasibility	X	Ease of implementation
Impact	Y	Transformative capacity of action in the direction of the set objectives
Velocity	Z	Time needed to execute the action

Number	KEY WORD	DESCRIPTION
1	<b>Multilevel governance</b>	Different decision-making levels of government are involved in the process. Existing multi-level governance complicates or facilitates the implementation of projects at local, regional and national level. At the highest level, the European Commission should remain mostly responsible for providing a platform through which national and regional/local governments can share ideas, experiences and adaptation/mitigation practices, together with lessons learned.
2	<b>Regulatory changes</b>	Need to adapt the existing regulatory framework to the new trends and current needs. Considering the existing local and regional regulations according to the objectives and actions to be taken under the European Climate law and the EU strategy on adaptation to climate change (European Green Deal, EU Taxonomy, etc.).
3	<b>Strategic reference frameworks</b>	Alignment with strategic reference frameworks, considering especially EU climate legislation and the specific regulatory framework at country level, taking also into account current market and new trends.
4	<b>Legislative time</b>	Short-term legislatures vs. time needed to adequately transform on an urban/regional scale to promote sustainable objectives, limiting development in the medium/long term.
5	<b>Licenses and permits</b>	Administrative licenses and permits can last for a long time, pending different levels of approval. Considerable impact over time due to bureaucratic and administrative procedures, hindering the implementation and/or development of projects/actions.
6	<b>Administrative capacity</b>	Nominated personnel lacks coordination/administrative and decision-making capacities to carry out certain projects.
7	<b>Internal communication</b>	Lack of internal communication between administrative/technical areas involved in the same project, working in silos without considering synergies with other potential areas.
8	<b>Multidisciplinarity</b>	Technical disciplines working under the same challenge, bringing professionals with different skills and expertise together to get different perspectives, ideas and solutions.
9	<b>Quadruple helix</b>	Support key actors (Civil Society, Academy, Public and Private sector) under co-creative processes in order to involve them and identify barriers from the initial meetings and definition of each project.
10	<b>Financial sustainability</b>	Considering the long term through all project's stages, from Design, Construction to Operation and Maintenance, in order to balance financial sustainability across the whole value chain.
11	<b>Budget constraint</b>	Public financing keys to attract investment funds (multilateral funding agencies).
12	<b>Public-private model</b>	Projects require a public-private financing mix to favor its implementation, through viable and sustainable economic models over time.
13	<b>Cultural context</b>	To accurately understand a place due to human behavior in relation to the surrounding environment. Cultural heritage is a key element that identifies cities and regions.
14	<b>Physical constraints</b>	Viable physical space in cities considering compact models or regulatory limitations.
15	<b>Innovation technologies</b>	Need to incorporate innovation and advanced technologies to optimize the process, retain talent and be more productive.

## PROJECT TOPICS

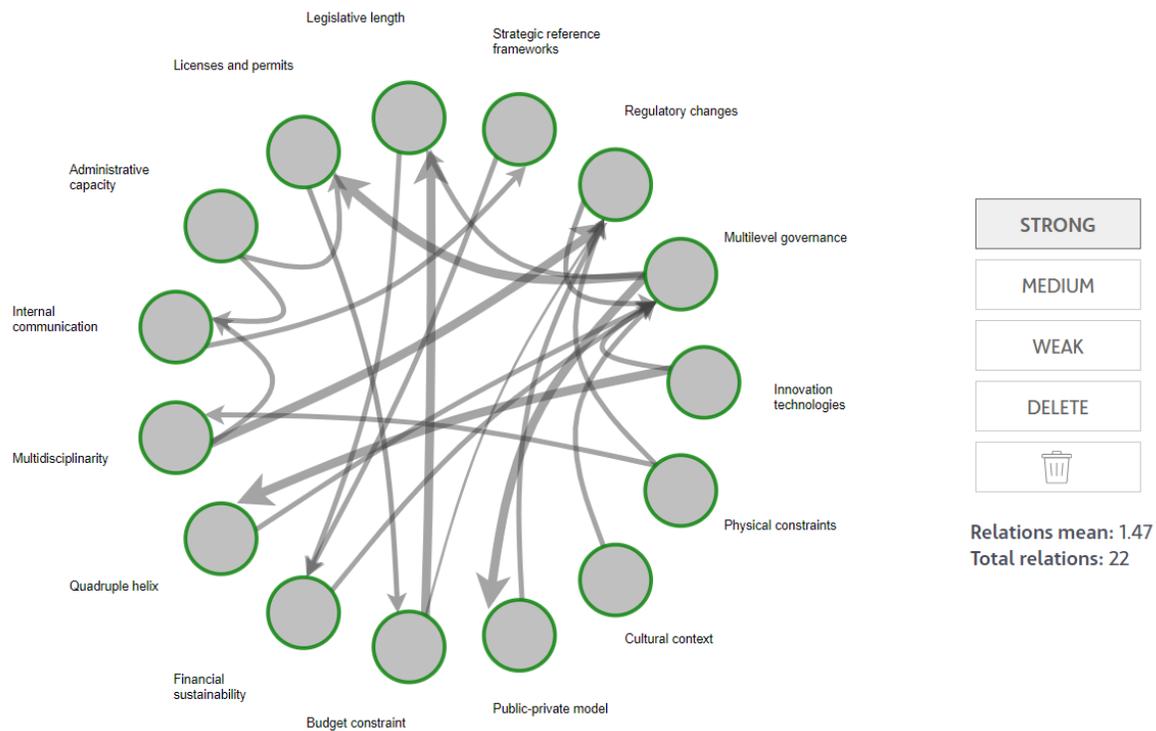
TOPIC		VALUES		
● Innovation technologies	i	<u>Feasibility</u>	<input type="range" value="0"/>	0
		<u>Impact</u>	<input type="range" value="0"/>	0
		<u>Velocity</u>	+ 3 years <input type="button" value="v"/>	5
● Physical constraints	i	<u>Feasibility</u>	<input type="range" value="0"/>	0
		<u>Impact</u>	<input type="range" value="0"/>	0
		<u>Velocity</u>	+ 3 years <input type="button" value="v"/>	5
● Cultural context	i	<u>Feasibility</u>	<input type="range" value="0"/>	0
		<u>Impact</u>	<input type="range" value="0"/>	0
		<u>Velocity</u>	+ 3 years <input type="button" value="v"/>	5
● Public-private model	i	<u>Feasibility</u>	<input type="range" value="0"/>	0
		<u>Impact</u>	<input type="range" value="0"/>	0
		<u>Velocity</u>	+ 3 years <input type="button" value="v"/>	5



## RELATION BETWEEN TOPICS

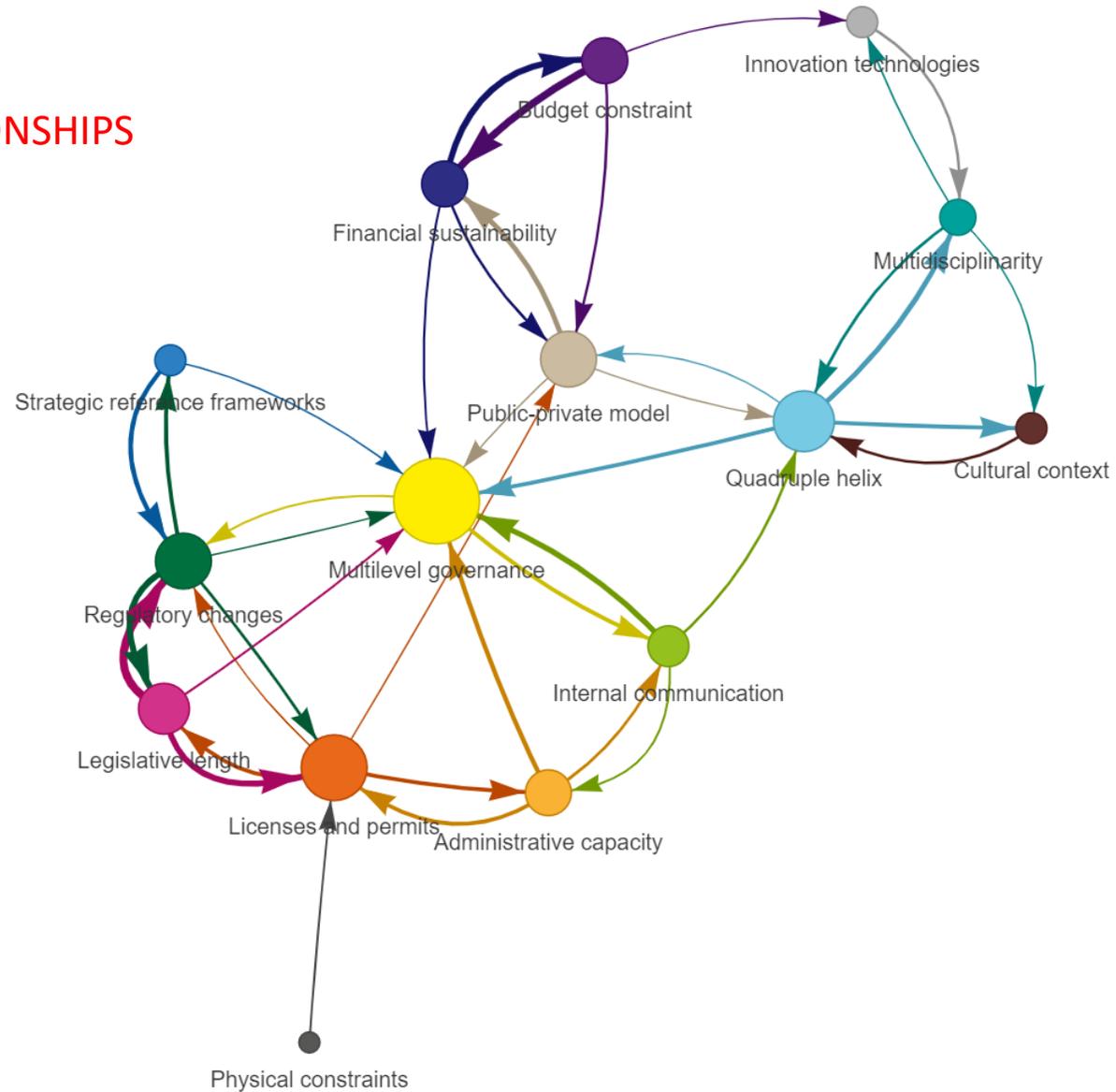
In this step we are going to establish the relationship that some topics have with others. For this we will have a list for each of the topics where we can establish the relationship with each of them.

1. Select the strength of the relationship: Strong, medium or weak.
2. Select the topic on which you want to establish the relationship
3. Drag the ball of the chosen topic onto the target topic of the relationship
4. Once all the relationships have been indicated, click on the **send data button**



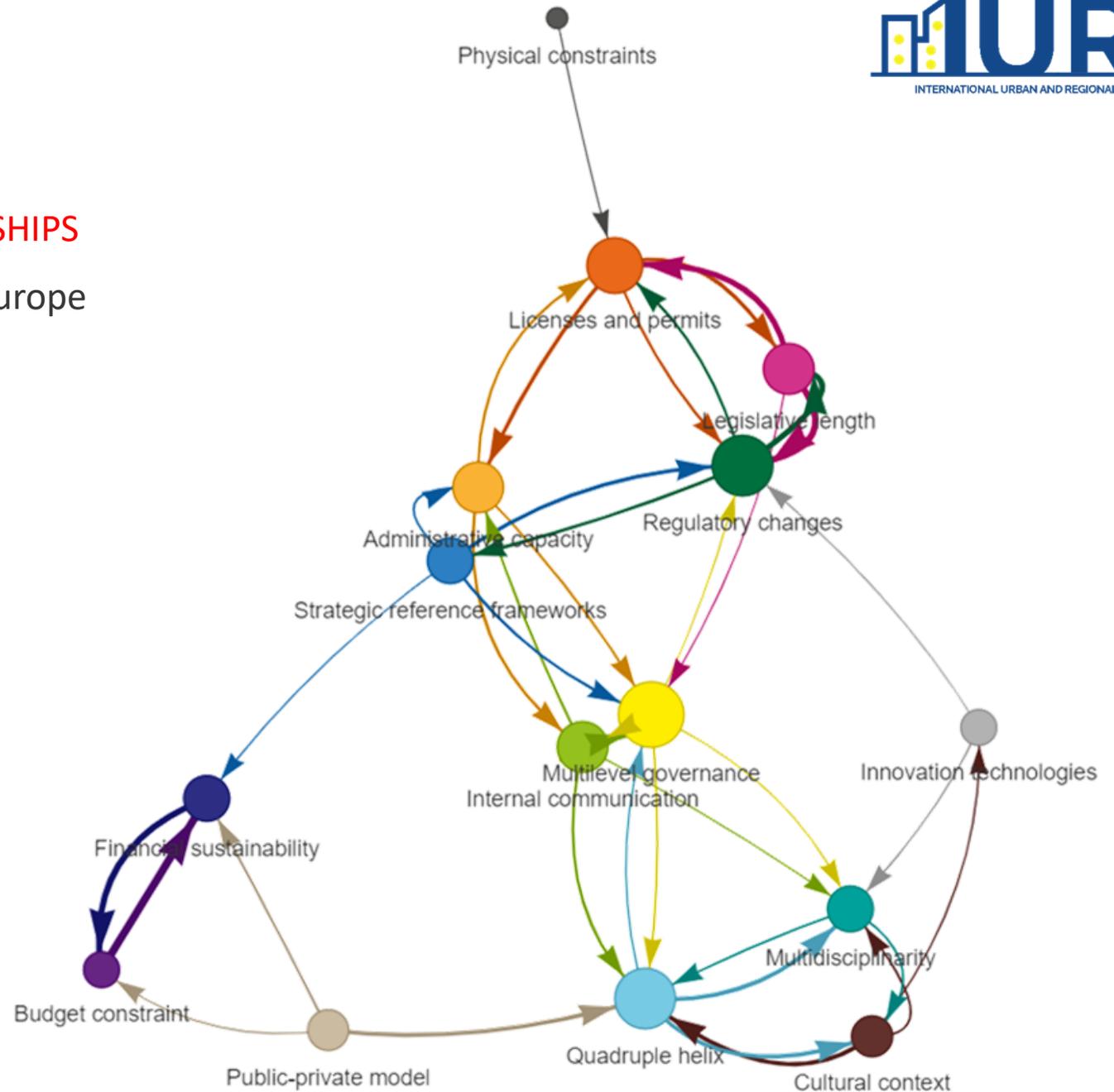
## RESULTS: STRENGTH OF RELATIONSHIPS

Australasia – China – Europe



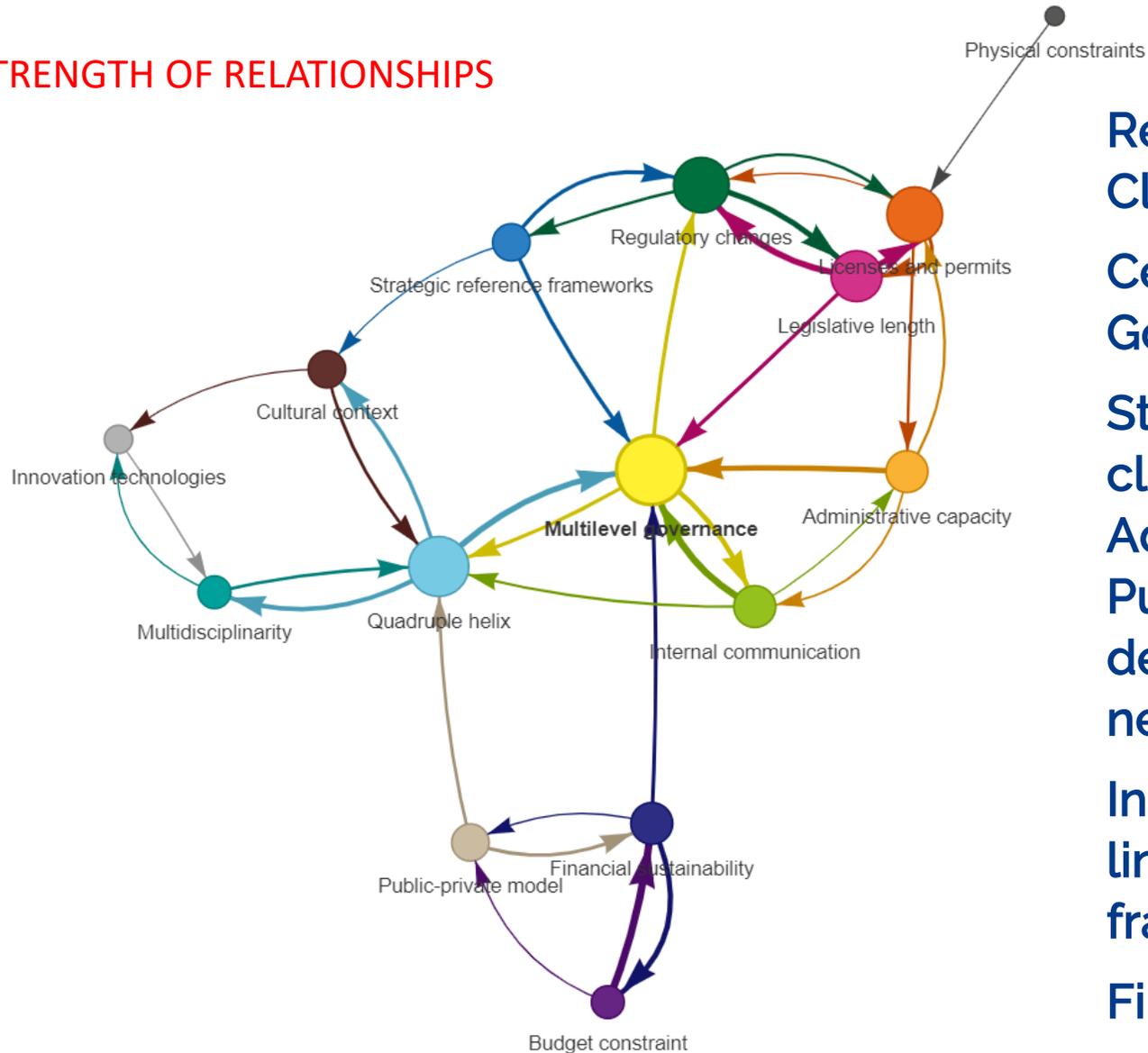
**RESULTS: STRENGTH OF RELATIONSHIPS**

Latin America – North America – Europe



**RESULTS: STRENGTH OF RELATIONSHIPS**

COMBINED



Relations are established in Clusters

Centrality in Multilevel Governance

Strong legal framework cluster together with Administrative Capacity and Public-Private models: will define the pathway for the next actions

Innovation technologies: linked to context and legal framework

Financing has a relevant role



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